REMARKS

OVERVIEW

Claims 1-17 and 30-35 are pending in this application. Claims 30-35 are new. Claims 1, 4, 7 and 10 have been amended. The Applicant thanks the Examiner for the courtesy extended during the Examiner Interview on May 3, 2002. The present response is an earnest effort to place the application in proper form for immediate allowance. Reconsideration and passage to issuance is respectfully requested.

INFORMATION DISCLOSURE STATEMENT

The Applicant filed an Information Disclosure Statement on February 22, 2002. That statement discloses prior art references that were cited by a U.S. PTO Examiner in a co-pending case having a Serial No. of 09/570,758. The Applicant respectfully requests the Examiner to consider those prior art references.

RESTRICTION REQUIREMENT

The Examiner stated that "[b]ecause the applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse." The Examiner then goes on to restrict out claims 18-29. The Applicant points out that the Examiner in Paper No. 5, never stated which claims were considered to be species I and which claims were considered to be species II. Rather, the Examiner chose to treat Figure 1 as species I and Figure 6 as species II. The Applicant properly responded by electing species I and specifying those claims readable thereon. There was no argument with traverse necessary at that time because there was no disagreement as to which claims read on Figure 1.

Nevertheless, the Applicant is canceling those claims which the Examiner has indicated are directed to species II as the Examiner has already conducted a search. The Applicant will likely pursue those claims restricted out in a divisional application.

SPECIFICATION

The Examiner has noted that the word "attenuate" means reduce, diminish, lessen, weaken, or similar terminology. The Examiner has further indicated that "it appears that applicant is using a term for a different meaning and should amend the Specification accordingly." (Office Action, page 2). As discussed in the Examiner Interview, the Specification makes clear that in a preferred embodiment of the present invention the strength of the broadcast signal from the transmitter attenuates to at most a negligible value that cannot be received by a matching or corresponding receiver. Consistent with this use of the word "attenuate," the Specification has been amended at pages 4, 5 and 8 without adding new matter.

The Applicant has also amended the Specification on page 6, first full paragraph, to include the sentence that "[t]he sounds can include heart sounds, lung sounds, or bowel sounds." This disclosure is clear from the original claims of the application as filed, including original claims 13-15. The Examiner previously objected to the Specification for failing to provide proper antecedent basis for the claimed subject matter as the subject matter of claim 15 was not disclosed. The Applicant submits that this amendment to the Specification remedies the Examiner's objection and the objection should now be withdrawn.

ISSUES UNDER 35 U.S.C. § 112

The Examiner previously rejected claim 7 under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the Specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time of the application was filed, had possession of the claimed invention. In particular, claim 7 recites that the pressure sensor is a Sphygmomanometer. Pursuant to the Examiner's suggestion, claim 7 has been amended to recite a "blood pressure sensing transducer." Therefore, the Applicant submits that this rejection should now be withdrawn.

ISSUES UNDER 35 U.S.C. § 103(a)

The Examiner has rejected claims 1-4, 6, 8-15, and 16-17 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,099,486 to Fruscello in view of U.S. Patent No. 6,002,777 to Grasfield, et al. ("Grasfield"). Neither Fruscello nor Grasfield discloses "a display secured to the housing [of the wireless device] and operatively connected to the pressure transducer for displaying a representation of an output from the pressure transducer." The Applicant does note that Grasfield discloses mode indicator LED's 174 (e.g. Figure 12) but this is not "a display . . . for displaying a representation of an output from the pressure transducer" as required by claim 1. As claims 2-4, 6, and 8-9 depend from claim 1, the Applicant respectfully submits that all such rejections should now be withdrawn.

Claims 1-3, 7-12, 16 and 17 have previously been rejected under 35 U.S.C. § 103(a) as being unpatentable over Thornton, et al. ("Thornton"). Claim 1 now requires "a display secured to the housing [of the wireless device] and operatively connected to the pressure transducer for displaying a representation of an output from the pressure transducer." This is simply not disclosed in Thornton. As the Examiner has stated, Thornton does not even have a pressure

transducer. Further, Thornton does not include a "display . . . for displaying a representation of an output from the pressure transducer." Thornton does disclose using a local monitor E within a patient's room or a display monitor and recorder D located remotely, such as at a nursing station. Neither monitor of Thornton is "secured to the housing." Therefore, the Examiner should now find claim 1 allowable. As claims 2-3 and 7-9 depend from claim 1, the Examiner should now also find these claims allowable as well.

Claim 10 requires "transducing a physiological pressuring using a device placed on a patient." As well as "displaying a representation of the physiological pressure on a display within the device." These limitations of the method of claim 10 are simply not disclosed in Thornton, therefore these rejections should be withdrawn and the Examiner should find claim 10 allowable. As claims 11-12 and 16-17 depend from claim 10, the Examiner should now also find these claims allowable as well.

NEW CLAIMS

This amendment adds new claims 30-35. Claim 30 depends from claim 1 and further requires "a memory operatively connected to the pressure transducer for storing an audio representation of the physiological pressure." Support for this new claim is found in the Specification, at least at page 6, the third full paragraph. Similarly, claim 31 is addressed to the same subject matter but to the methodology as opposed to the structure.

New claim 32 is an independent claim directed toward the same aspect of the invention. New claims 33 and 34 depend from new claim 32. Claim 33 includes "a display" and claim 34 includes "a temperature sensor."

New claim 35 depends from claim 1 and adds the further novel feature that "the transmitter is adapted to limit the power of the broadcast signal to at most a negligible value

within a predetermined distance from the transmitter." None of the cited references disclose or suggest this type of signal attenuation.

The Applicant submits the Examiner should now find the new claims allowable as well.

SUMMARY

Based upon the foregoing, the Applicant respectfully submits that all pending claims are in condition for immediate allowance, as they are patentably distinguishable over the prior art.

Please charge Deposit Account No. 26-0084 $18.00 for the additional claims over 20 and the additional independent claims, along with the three-month extension of time fee of $460.00. No other fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

Proper reconsideration and passage to allowance are respectfully requested. Should the Examiner have any questions about the case or this amendment, he is invited to contact the undersigned at 515-288-3667.

Respectfully submitted,

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- bja/smz -

Application No. P04425US0

AMENDMENT — VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification

Please amend the penultimate paragraph of page 4 of the Specification as follows:

The present invention includes a device for monitoring and wirelessly transmitting a physiological pressure. The device includes a pressure transducer and a transmitter which is in operative communication with the transducer. The transmitter is adapted to broadcast a signal which is modulated by a transduced pressure. The transmitter is also adapted to limit the power of the signal so that the signal attenuates to a negligible value within a predetermined distance from the transmitter. Optionally, the invention may also include a receiver which receives a signal broadcast by the transmitter.

Please amend the last paragraph on page 4 of the Specification as follows:

The present invention can also include a method of monitoring and transmitting a physiological pressure. The method includes the steps of transducing the pressure and broadcasting a signal which is modulated by the transduced pressure. The method also includes the step of limiting the power of the broadcast signal so that the signal attenuates to a negligible value within a predetermined distance. The method can optionally include additional steps such as receiving the broadcast signal, recovering the pressure/sound from the received signal, and storing the measurement in a digital record.

Please amend the first full paragraph of page 6 of the Specification as follows:

Figure 1 shows a bottom plan view of a wireless stethoscope 10 according to an embodiment of the present invention. Stethoscope 10 includes a diaphragm 12 and a bell 14.

Diaphragm 12 is conventional. Diaphragm 12 is preferably comprised of plastic and operates in conjunction with a microphone to transduce sound waves into electrical signals. Any material which can transduce sound (or other physiological pressure) into an electric or magnetic signal, such as a piezoelectric material, could be used. Bell 14 is a conventional stethoscope bell. The sounds can include heart sounds, lung sounds, or bowel sounds.

Please amend the first full paragraph on page 8 of the Specification as follows:

Preferably, the power of the broadcast signal is limited so that the signal will attenuate to a negligible value within a predetermined distance from the transmitter. As used thorughout the present application, signal attenuation refers to the lessening in signal strength to at most a negligible value such that the signal cannot be effectivley received by a corresponding or matching receiver. Figure 4 shows a schematic representation of this scheme. For a hospital setting, the transmission radius is preferably 15 feet or less, within 10 feet being ideal.

In the Claims

Kindly cancel claims 18-29, which the Examiner has previously restricted out of the application.

Please amend claims 1, 4, 7, and 10 as follows:

1. (Amended)

A new wireless device for monitoring a physiological pressure having the advantages of limiting electromagnetic interference and consuming little power, comprising:

a housing for protecting the device;

a pressure transducer operatively attached to the housing; and

a transmitter in operative communication with the transducer and operatively attached to the housing, the ~~transmitted~~ transmitter adapted to broadcast a signal which is modulated by an output of the pressure transducer; and

~~wherein the transmitter is adapted to limit the power of the broadcast signal so that the signal will attenuate within a predetermined distance from the transmitter.~~

a display secured to the housing and operatively connected to the pressure transducer for displaying a representation of an output from the pressure transducer.

4. (Amended)

The device of claim 1, further comprising:

a temperature sensor, wherein the transmitter is adapted to convey a signal which is modulated by outputs of both the pressure transducer and the temperature sensor~~.~~, and wherein the display is further adapted to display a representation of an output from the temperature sensor.

7. (Amended)

The device of claim 1 wherein the pressure transducer is a ~~sphygmomanometer.~~ blood pressure sensing transducer.

10. (Amended)

A new method of monitoring a physiological pressure having the advantages of limiting electromagnetic interference and consuming little power, comprising:

transducing a physiological pressure using a device placed on a patient;

displaying a representation of the physiological pressure on a display on the device;

broadcasting a signal which is modulated by the transduced physiological pressure; and

limiting the power of the signal so that it will attenuate to at most a negligible value within a predetermined distance.

Please enter new claims 30-34 as follows:

30. (New)

The device of claim 1 further comprising a memory operatively connected to the pressure transducer for storing an audio representation of the physiological pressure.

31. (New)

The method of claim 10 further comprising recording an audio representation of the physiological pressure within the device.

32. (New)

A device for monitoring physiological pressure, comprising:

a housing;

a pressure transducer operatively attached to the housing;

a transmitter operatively connected to the pressure transducer;

a memory disposed within the housing and operatively connected to the pressure transducer for storing an audio representation of a sound transduced by the pressure transducer.

33. (New)

The device of claim 32 further comprising a display operatively connected to the pressure transducer for displaying a representation related to an output of the pressure transducer.

34. (New)

The device of claim 33 further comprising a temperature sensor operatively connected to the display, and wherein the display is adapted for displaying a representation related to an output of the temperature sensor.

35. (New)

The device of claim 1 wherein the transmitter is adapted to limit the power of the broadcast signal so that the signal will attenuate to at most a negligible value within a predetermined distance from the transmitter.